



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/955,777	09/19/2001	James R. Geary	1632A1	9740

7590

05/04/2004

Donald C. Lepiane, Esq.
PPG INDUSTRIES, INC.
One PPG Place
Pittsburgh, PA 15272

EXAMINER

VO, HAI

ART UNIT

PAPER NUMBER

1771

DATE MAILED: 05/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

AS

Office Action Summary	Application No. 09/955,777	Applicant(s) GEARY ET AL.	
	Examiner Hai Vo	Art Unit 1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 October 2003.
 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2,4,6-25 and 28-48 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) ☒ Claim(s) 4 and 21 is/are allowed.
 6) ☒ Claim(s) 2,6-20,22-25 and 28-48 is/are rejected.
 7) ☐ Claim(s) _____ is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Election/Restrictions

1. The restriction requirement is considered moot in view of the cancellation of non-elected claims 26 and 27.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 7-13, 31-38, 40, and 42-48 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 7, 11, 31, 40, 42, and 45, each contain improper Markush language.

Claim Objections

4. Claims 30-38 are objected to because of the following informalities: claim 30, line 2, the phrase "is secured" should be deleted to avoid grammatical errors. Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 2, 6, 7, 11, 14, and 28-31 are rejected under 35 U.S.C. 102(b) as being anticipated by Millar, Jr. (US 4,812,093). Millar, Jr. discloses a stake pocket tie-down anchor comprising an L-shaped member 12 made of steel, having two legs: a

vertical leg 14 and the horizontal leg 16 having a tie-down connection 20 attached thereto (figure 1). The stake pocket tie-down anchor further comprises a compressible pad of foam rubber 30 attached to the horizontal leg 16 via an adhesive (column 2, lines 27-29). Likewise, it is readily apparent that the L-shaped steel member is harder than the rubber foam pad. Mere recitation of "for packaging glass sheets" impacts no definite structure to the claimed restraint and is therefore found inadequate to convey structure in any patentable sense. The glass sheets are not part of the restraint structure. It is the examiner's position that Millar, Jr. anticipates the claimed subject matter.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 39-42, and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Millar, Jr. (US 4,812,093). Millar, Jr. does not specifically disclose the foam rubber pad 30 attached to the steel L-shaped member 16 by a mechanical fastener. Figure 1 of Millar shows that the clamping plate 24 attached to the L-shaped member by a fastener 28 (figure 1). Likewise, the rubber foam 32 is attached to the L-shaped member via a fastener 26. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute the mechanical fastener for the adhesive for attaching the foam rubber pad 30 to the L-

shaped steel member because these two have been shown in the art to be recognized as equivalent for attaching the foam rubber pad to the L-shaped steel.

Millar, Jr. does not specifically disclose the foam rubber pad attached to the steel L-shaped member by molding. However, it is a product-by-process limitation not as yet shown to produce a patentably distinct article. It is the examiner's position that the stake pocket tie-down anchor of Millar, Jr. is identical to or only slightly different than the claimed restraint prepared by the method of the claim, because both articles are formed from the same materials, having structural similarity. The stake pocket tie-down anchor comprises an L-shaped member 12 of steel, having two legs: a vertical leg 14 having a threaded hole 18 and the horizontal leg 16 having a tie-down connection 20 attached thereto. The stake pocket tie-down anchor further comprises a compressible pad of foam rubber 30 attached to the horizontal leg 16 via an adhesive (column 2, lines 27-29). It is noted that if the applicant intends to rely on Examples in the specification or in a submitted Declaration to show non-obviousness, the applicant should clearly state how the Examples of the present invention are commensurate in scope with the claims and how the Comparative Examples are commensurate in scope with Millar, Jr.

9. Claims 8-10, 32-34, 43 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Millar, Jr. (US 4,812,093) as applied to claims 2, 31 and 42, further in view of Karp (US 4,957,400). Millar, Jr. does not specifically disclose the protective pad made of polyethylene foam. Karp, however, teaches a protective pad for pickup trucks made of polyurethane, polyethylene foam, which appears to be a

Art Unit: 1771

tough resilient foam material (column 2, lines 48-55). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute the polyethylene foam for the rubber foam because these two foam materials have been shown in the art to recognized equivalent for a tough resilient foam of the protective pad.

10. Claims 2, 6, 7, 11-16, 19, 20, 23-25, 28-31, 39-42, and 45-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moehring (US 3,938,660) in view of Sauer et al (US 5,878,548). Moehring discloses a composite packing for shipping a stack of glass sheets comprising a base 35, a plurality of glass sheets carried on the base, at least one pad 50 located along the two opposed edges of the glass sheet wherein the pad 50 is comprised of a plastic material and a rigid tubular runner 51 made of wood extending along the pad 50 and through the runner 51 the banding strap 41 is threaded (column 4, lines 45-49, figure 1). Likewise, it is readily apparent that the runner is harder than the pad. The pad 50 is L-shaped and provided with raised portions 52, 53 having a strap retainer portion 54. The raised portions 52, 53 correspond to the claimed attachment member whereas the strap retainer portion corresponds to the claimed slot. Figure 1 of Moehring shows a plurality of flat glass sheets 58 carried on the base 35 and a back wall 25 secured to the base wherein the fastening member 41 biases at least on laminated restraint and the glass sheets toward the back wall 25. Moehring discloses that the runner 51 is disposed between the pad 50 and the banding strap 41. Moehring does not specifically disclose the pad being bonded to the runner. Sauer, however, teaches that an edge protector for

Art Unit: 1771

protecting the top corners of stacks of lumber comprising an L shaped base 11 and a runner 57 through which the cable 19 is threaded (figure 2). Sauer also teaches that the base and the runner being bonded together (column 3, lines 15-23). It appears that the pressure member of Moehring and the edge protector of Sauer both serve for the same purposes, protecting the corner of stacks of articles. Both have the L-shaped base, the runner provided on the base and through the runner the cable is threaded. In view of Sauer, it would have been obvious to one of skill in the art to make the pad and runner integral, motivated by the expectation of preventing damage to the glass stack by preventing the possibility of the runner slipping off the pad during rough handling and by *Howard v. Detroit Store Works*, 150 US 164 (1893) where it was held that forming in one piece an article formerly that has been formed in two pieces involves on routine skill in the art. Note also *in re Larson*, 144 USPQ 347. Sauer teaches that the runner and the pad should be bonded to each other for sufficient performance as a corner protector. It is believed that once the prior art renders obvious attaching the runner and the pad to each other as taught from the Sauer invention, the mechanisms to attach them, i.e., using an adhesive or a mechanical fastener are not a patentable advance but involve only routine skill in the art. Therefore, in the absence of unexpected results, it would have been obvious to one having ordinary skill in the art at the time the invention was made to bond the runner to the pad using an adhesive or a fastener motivated by the desire to attach the stack of glass article to the shipping rack in a more secure manner, thereby facilitating the lifting and shipping. This is important to the

Art Unit: 1771

expectation of successfully practicing the invention of Moehring and thus suggesting the modification.

Moehring discloses that the runner is made of a plastic material. Moehring does not specifically disclose the runner made of a polyurethane. Sauer teaches that a corner protector for protecting the top corners of stacks of lumber is made of polyurethane because of its high degree of wear and permanent set resistance (figure 2, column 3, lines 15-23, column 1, lines 45-55). This is important to the expectation of successfully practicing the invention of Moehring and thus suggesting the modification. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the polyurethane as the runner of the composite packing because of its high degree of wear and permanent set resistance.

11. Claims 8-10, 17, 18, 22, 32-38, 43 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moehring (US 3,938,660) in view of Sauer et al (US 5,878,548) as applied to claims 2, 16, 31 and 42 above, and further in view of Maurice (US 4,851,286). Moehring is silent as to the pad made of a foam polyethylene. Maurice, however, teaches that a corner protector for protecting fragile articles from impact damage during transport and storage is made of polyethylene with a density of 0.5 to 10 pcf within the claimed range (column 1, lines 50-63, column 6, lines 15-30). The Maurice foam pad and the Moehring pad are L-shape members used for the same purposes, i.e., protecting the edge of glass articles from impact damage during transport and storage. Maurice also teaches the

Art Unit: 1771

polyethylene foam pad having shatter resistant to resist breakage and crumbling when flexed, cut or struck. Accordingly, there are no reasons why the Maurice foam pad could not be used with the banding system of Moehring for protecting the glass articles during shipping. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the foam polyethylene as the pad of the composite packing because of its shatter resistant to resist breakage and crumbling when flexed, cut or struck. This is important to the expectation of successfully practicing the invention of Moehring and thus suggesting the modification.

12. The 102 art rejections over Moehring (US 3,938,660) have been overcome by the present amendment.

13. Applicant's arguments with respect to claims 2, 6-20, 22-25, and 28-48 have been considered but are moot in view of the new ground(s) of rejection.

Allowable Subject Matter

14. Claims 4 and 21 are allowed. None of the prior art discloses or suggests the restraint in either claim 1 or 16 wherein adjacent ends of the first and second legs are spaced from one another and the vertex comprises a groove in the second surface of the outer layer.

Conclusion

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai Vo whose telephone number is (571) 272-1485.

Art Unit: 1771

The examiner can normally be reached on M,T,Th, F, 7:00-4:30 and on alternating Wednesdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hai Vo

HV